

REMARKS

As of the date of the present preliminary amendment, U.S. Patent No. 6,117,700 to Orita et al. ('700 patent) from which the subject reissue application is based, issued on September 12, 2000 with claims 1 to 15. By the present preliminary amendment, claims 16 to 43 are added in the subject reissue application to claims 1 to 15. Claims 16, 25, 33, and 39 are independent claims while the remainder of the claims are dependent thereon. Explanations of the support in the disclosure for the added claims are provided herein below.

Claims 16 to 24 each claim a method for fabricating a semiconductor device, comprising the steps of a) forming a semiconductor layer of a Group III nitride containing a dopant over a substrate, and b) applying RF power on the semiconductor layer, thereby making the conductivity type of the semiconductor layer p-type. The support for the newly added claims 16 to 24 is found in the Specification of the '700 patent which describes forming of a semiconductor layer by applying RF power thereon. (See Col. 6 , lines 36-48).

Claims 25 to 32 each claim a method for fabricating a semiconductor device, comprising the steps of a) forming a semiconductor layer of a Group III nitride containing a dopant over a substrate, b) forming a p-side electrode out of a metal on the semiconductor layer; and c) applying RF power on the semiconductor layer, thereby making the conductivity type of the semiconductor layer p-type. The support for the newly added claims 25 to 32 is found in the Specification of the '700 patent which describes forming of a semiconductor layer by applying RF power thereon and forming of a p-side electrode. (See Col. 6 , lines 36-55; Col. 9, lines 13-31).


Claims 33 to 38 each claim a method for fabricating a semiconductor device, comprising the steps of a) forming a semiconductor layer of a Group III nitride containing a dopant over a substrate, and b) after introducing the substrate into a vacuum chamber, charging plasma into the vacuum chamber to form an ambient of plasma while keeping

the temperature of the substrate at about 600°C or lower, thereby making the conductivity type of the semiconductor layer p-type. The support for the newly added claims 33 to 38 is found in the Specification of the '700 patent which describes forming of a semiconductor layer and charging plasma after introducing the substrate into a vacuum chamber. (See Col. 6, lines 13-22, 28-40, 63-67).

Lastly, claims 39 to 43 each claim a method for fabricating a semiconductor device, comprising the steps of a) forming a semiconductor layer of a Group III nitride containing a dopant over a substrate, b) forming a p-side electrode out of a metal on the semiconductor layer, and c) after introducing the substrate into a vacuum chamber, charging plasma into the vacuum chamber to form an ambient of plasma while keeping the temperature of the substrate at about 600°C or lower, thereby making the conductivity type of the semiconductor layer p-type. The support for the newly added claims 39 to 43 is found in the Specification of the '700 patent which describes forming of a semiconductor layer, forming a p-side electrode out of a metal, and charging plasma after introducing the substrate into a vacuum chamber. (See Col. 6, lines 13-22, 28-40, 49-55, 63-67).

Correspondingly, no new matter is present by the above added claims and examination on the merits and issuance of the subject reissue application is respectfully requested.

Respectfully submitted,


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